

Remarks/Arguments

By this Amendment, Applicants have amended claims 1, 6, and 11, and have cancelled claim 10. Accordingly, claims 1, 6-7, and 11-14 are pending.

CLAIM REJECTIONS UNDER § 103

Claims 1, 6 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Prior Art as Admitted by Applicant ("APA") in view of Kamei (JP359117280A), Sonobe et al (US 2002/0153532 A1), and Kusuda (JP403194978A); claims 7 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over APA, Kamei, Sonobe and Kusuda, and further in view of Breeze (US5394653); and claims 13-14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over APA, Kamei, Sonobe and Kusuda, and further in view of Mead (US5763909). These rejections are respectfully overcome by the amendments transmitted herewith.

In regard to the rejection of claims 1, 6, and 12, the Office Action contends that Sonobe et al provides the motivation for combining the teaching by Sonobe into the invention of the APA, and "thereby make[s] it obvious that the number of bonding pads can be made advantageously to equal the number of control terminals in the invention of Kamei in order to improve the capitalization of surface area while preserving the integrity of the connections."

Further, with respect to claim 1, the Examiner acknowledges that "neither the APA, nor Sonobe et al, nor Kamei necessarily teach the final three lines of claim 1..." However, the Office Action recites "the 'Prime Factor Feature' defines a range for M and N that partly overlaps with that found in the prior art." Accordingly, claim 1 is amended to restrict the range of valid values of N to values greater than or equal to 8, thereby defining a range that does not overlap with that found in the prior art.

Applicants further contend that claim 7 has been previously amended to also include the Prime Factor Feature and currently amended to define a range of values for N that does not overlap those found in the prior art, and therefore like claim 1 is patentably distinguished from the references of record.

Further with respect to claim 6, the Office Action recites "it is clear that, combined with the remainder of the limitations, the teaching by Kusuda of the selection of 6 thyristors and 2 gate-selecting lines provides either the smallest value for M, and hence the further limitation involved here defines a range that partly overlaps with the one found in the prior art." Accordingly, claim 6 is amended to restrict the range of valid values of N to any even integer other than 6, thereby defining a range that does not overlap with that found in the prior art.

Applicants further contend that claim 11 has been previously amended to also include the Prime Factor Feature and currently amended to define a range of values for N that does not overlap those found in the prior art, and therefore like claim 6 is patentably distinguished from the references of record.

Therefore, independent claims 1, 6-7, and 11 are not subject to rejection under 35 U.S.C. § 103(a) as being unpatentable over Prior Art as Admitted by Applicant ("APA") in view of Kamei, Sonobe et al, and Kusuda. Additionally, claims 12-14 depend from one of claims 1 and 6, and are, thus, not subject to rejection under 35 U.S.C. § 103(a) for at least the same reasons as one of claims 1 and 6.

The Kamei Reference concerns a semiconductor light-emitting device having a substrate 1, a stripe shaped resistor body 8 formed in correspondence with each light-emitting part 5 at an adjacent position of an array 3. A plurality of bonding pads 9a-9d and contact electrode 7 are connected by a bonding wire 10. The light-emitting element array 3 includes a

semiconductor body 4. But nowhere in the Kami Reference is there any teaching or suggestion of the Prime Factor Feature of Applicant's claimed invention.

The Sonobe Patent concerns a power semiconductor module comprising a metal base, a plurality of wiring substrates provided on the base, and first wiring substrate of the wiring substrates. The first wiring substrate has a power circuit portion including a power semiconductor device, and a substrate containing portions having a resin portion in which one of the wiring substrates is contained. One of the wiring substrates is positioned in self-alignment on the metal substrate on the basis of an inner wall of the resin portion of the substrate-containing portion. But nowhere in the Sonobe Patent is there any teaching or suggestion of the Prime Factor Feature.

The Breeze Patent relates to a bi-directional drive multiplexed display system for use with multicharacter displays. In the Breeze system, each character is composed of a plurality of segments which are of a unidirectional type. Selected segments of each character are sequentially illuminated to display alphanumeric or other symbols. In the Breeze system, the number of interconnections between the display and the drive circuit are reduced. But nowhere in the Breeze Patent is there any teaching or suggestion of the Prime Factor Feature of Applicant's claimed invention.

The Mead Patent in general relates to an integrating imaging system with a phototransistor. The Mead Patent has been cited primarily with respect to parallel or serial input/output registers. But the Mead Patent simply does not rectify the deficiencies heretofore discussed with respect to the other references of record concerning the Prime Factor Feature of Applicant's claimed invention.

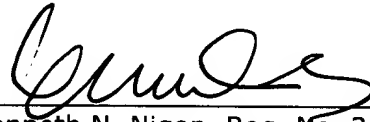
Because none of the cited references discloses or suggests the prime factor feature, the combination of references can not disclose or suggest this feature.

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In view of the foregoing remarks and amendments, Applicants respectfully submit that claims 1, 6-7, and 11-14 are in condition for allowance. Reconsideration and allowance of all pending claims are respectfully requested.

Respectfully submitted,



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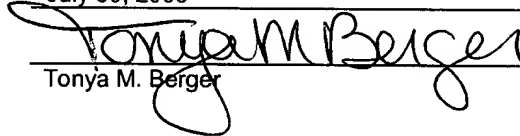
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